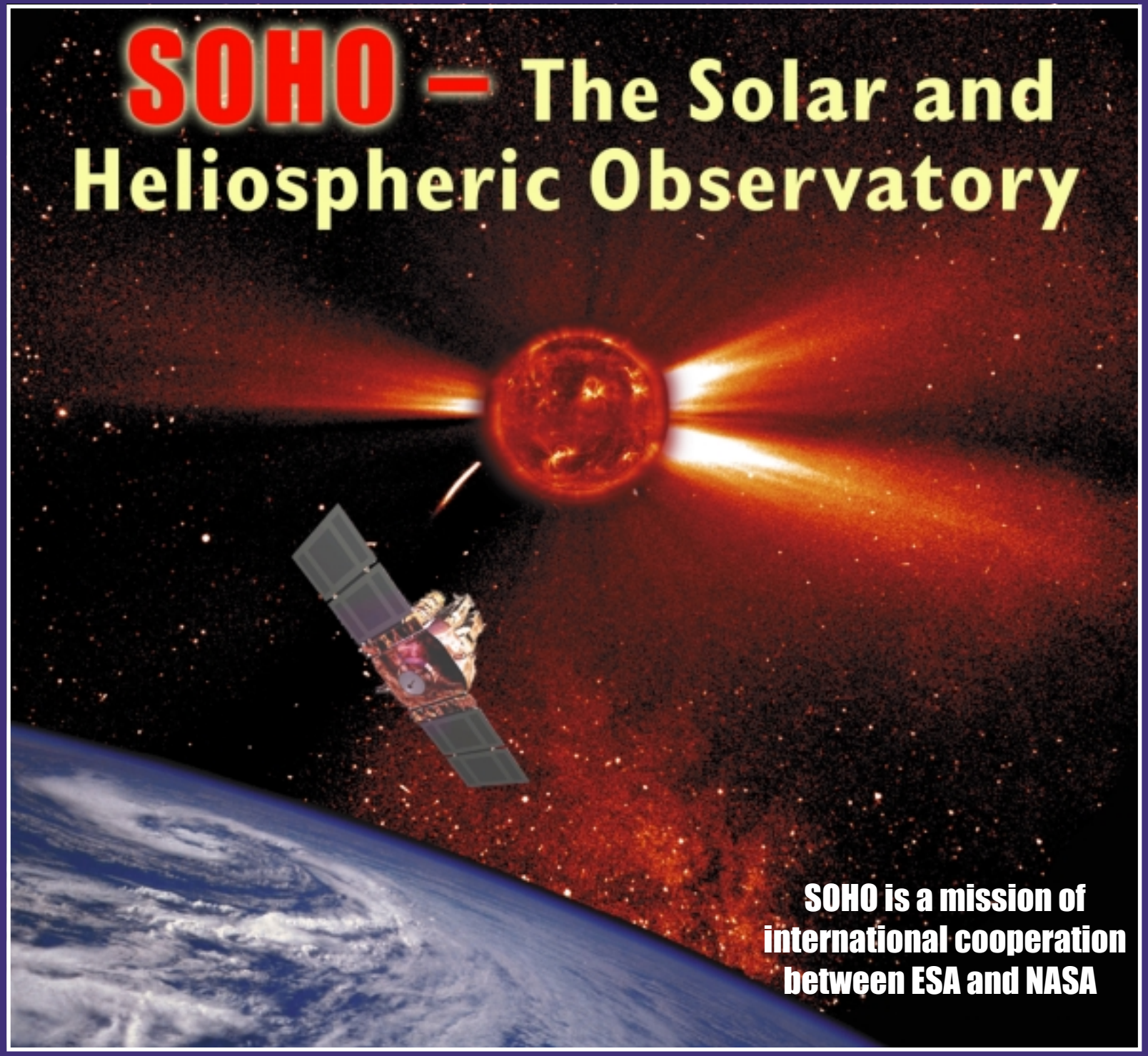
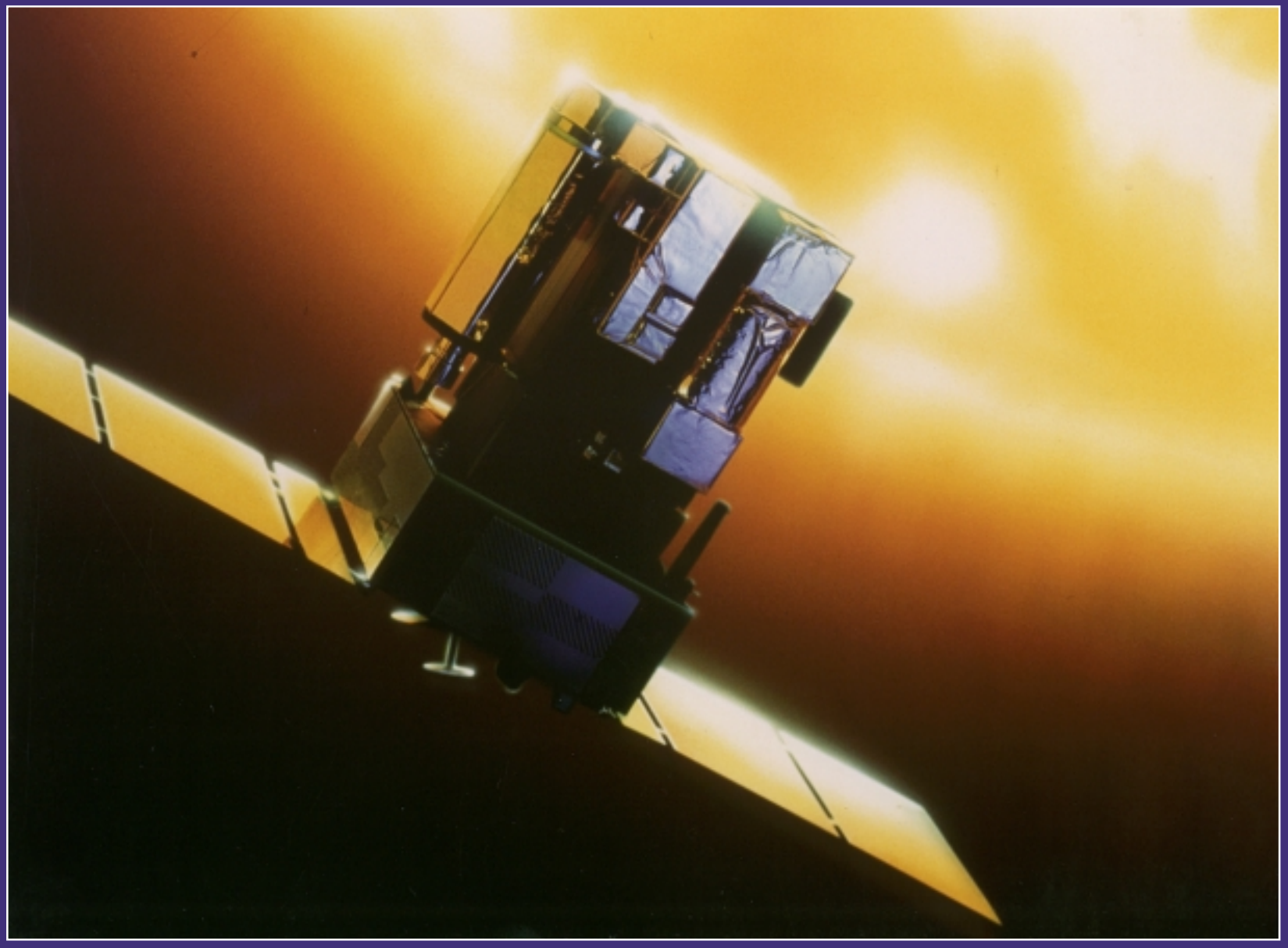
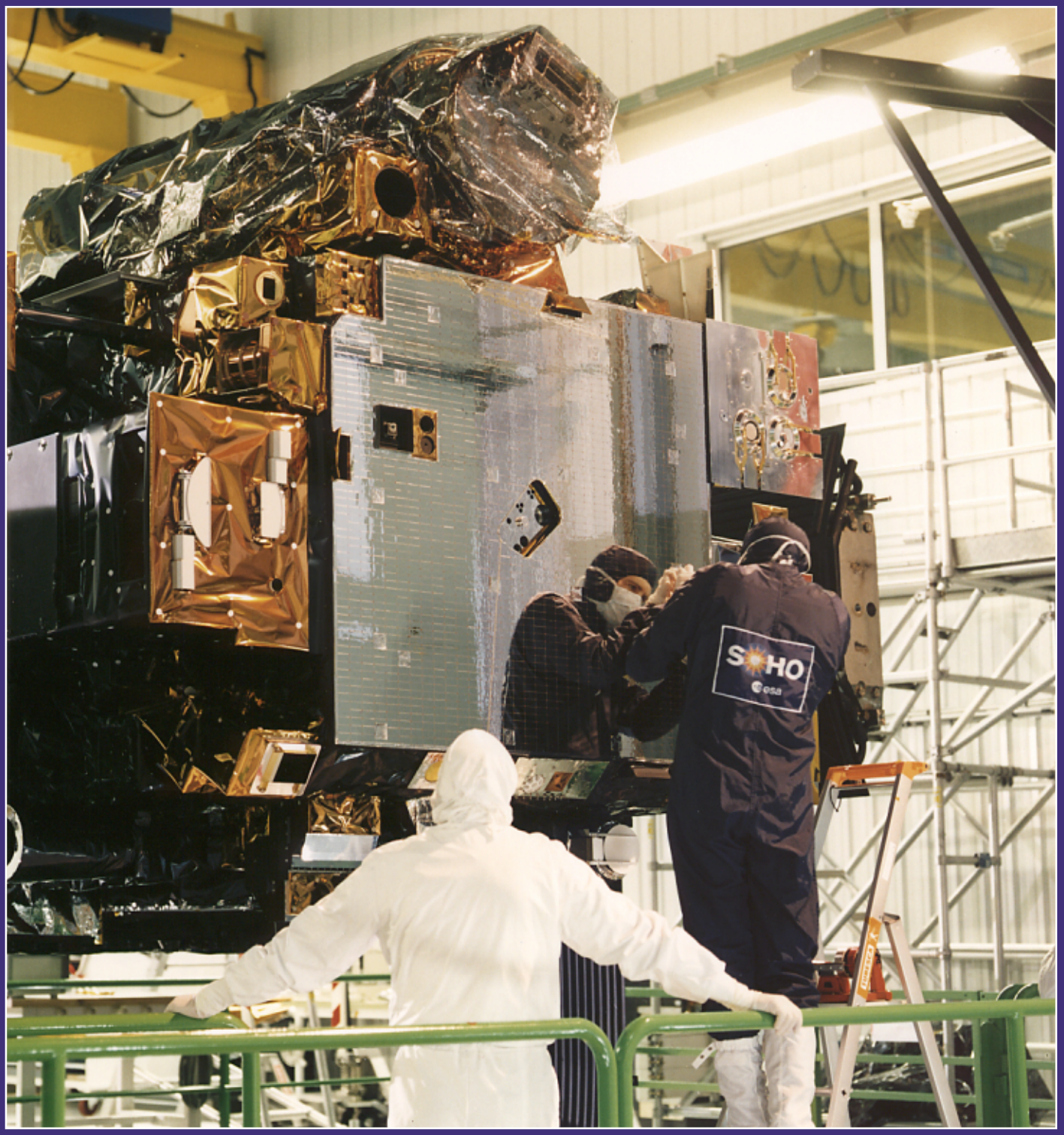

SOHO – The Solar and Heliospheric Observatory
SOHO is a mission of international cooperation between ESA and NASA



Artist’s rendition of the SOHO spacecraft



SOHO spacecraft being prepared for thermal tests at Intespace in Toulouse, France

SOHO payload module, without thermal blankets, at the end of its integration and testing at Matra Marconi Space

The SOHO Spacecraft

1 SUMER: Solar Ultraviolet Measurements of Emitted Radiation

2 CDS: Coronal Diagnostic Spectrometer

3 EIT: Extreme-ultraviolet Imaging Telescope

4 UVCS: UltraViolet Coronagraph Spectrometer

5 LASCO: Large-Angle and Spectrometric COronagraph

6 SWAN: Solar Wind ANisotropies

11 MDI: Michelson Doppler Imager

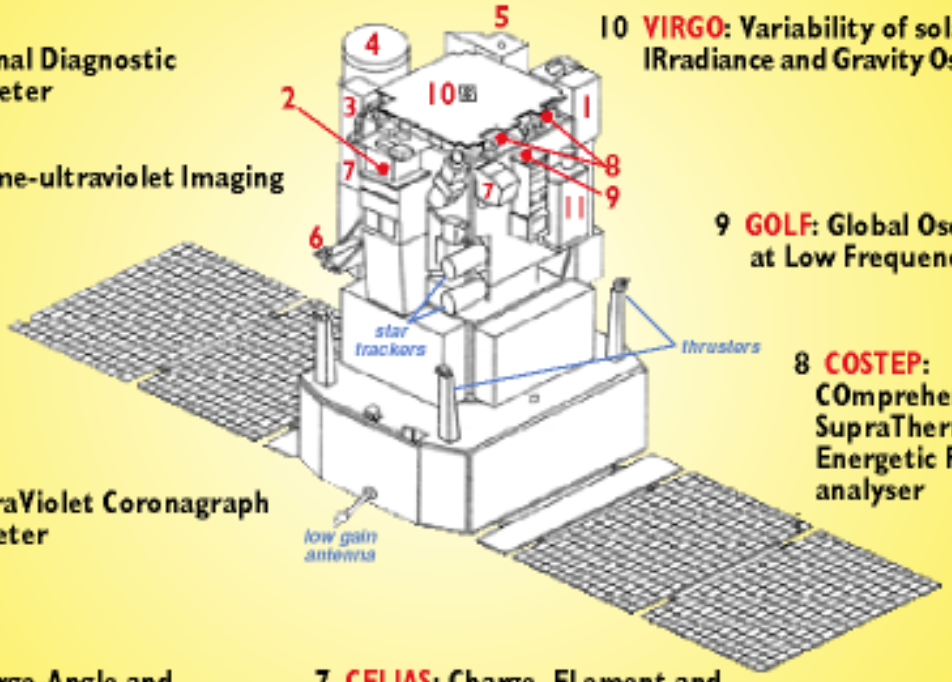
10 VIRGO: Variability of solar IRradiance and Gravity Oscillations

9 GOLF: Global Oscillations at Low Frequencies

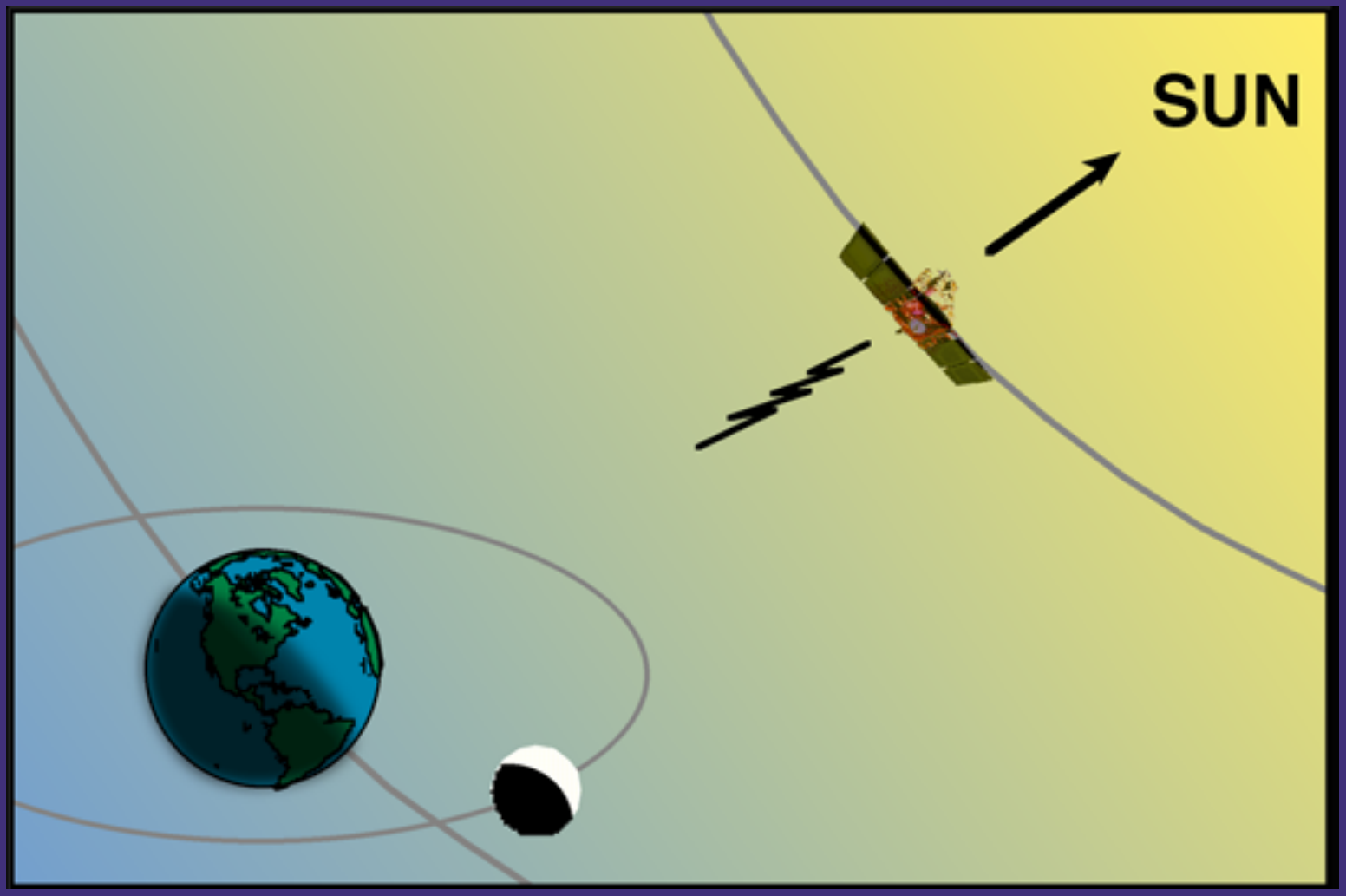
8 COSTEP: COmprehensive SupraThermal and Energetic Particle analyser

7 CELIAS: Charge, ELement and Isotope Analysis System

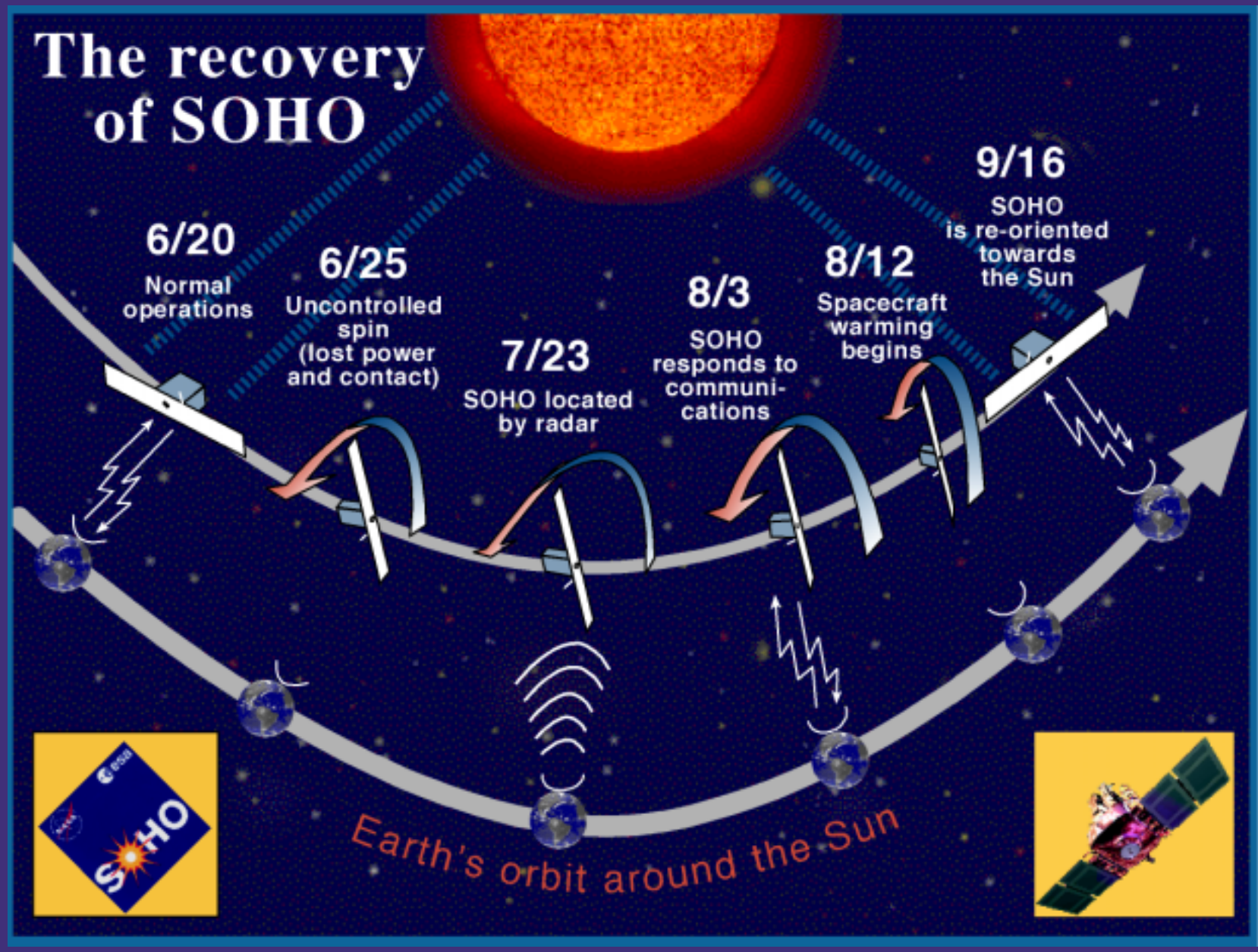
8 ERNE: Energetic and Relativistic Nuclei and Electron experiment



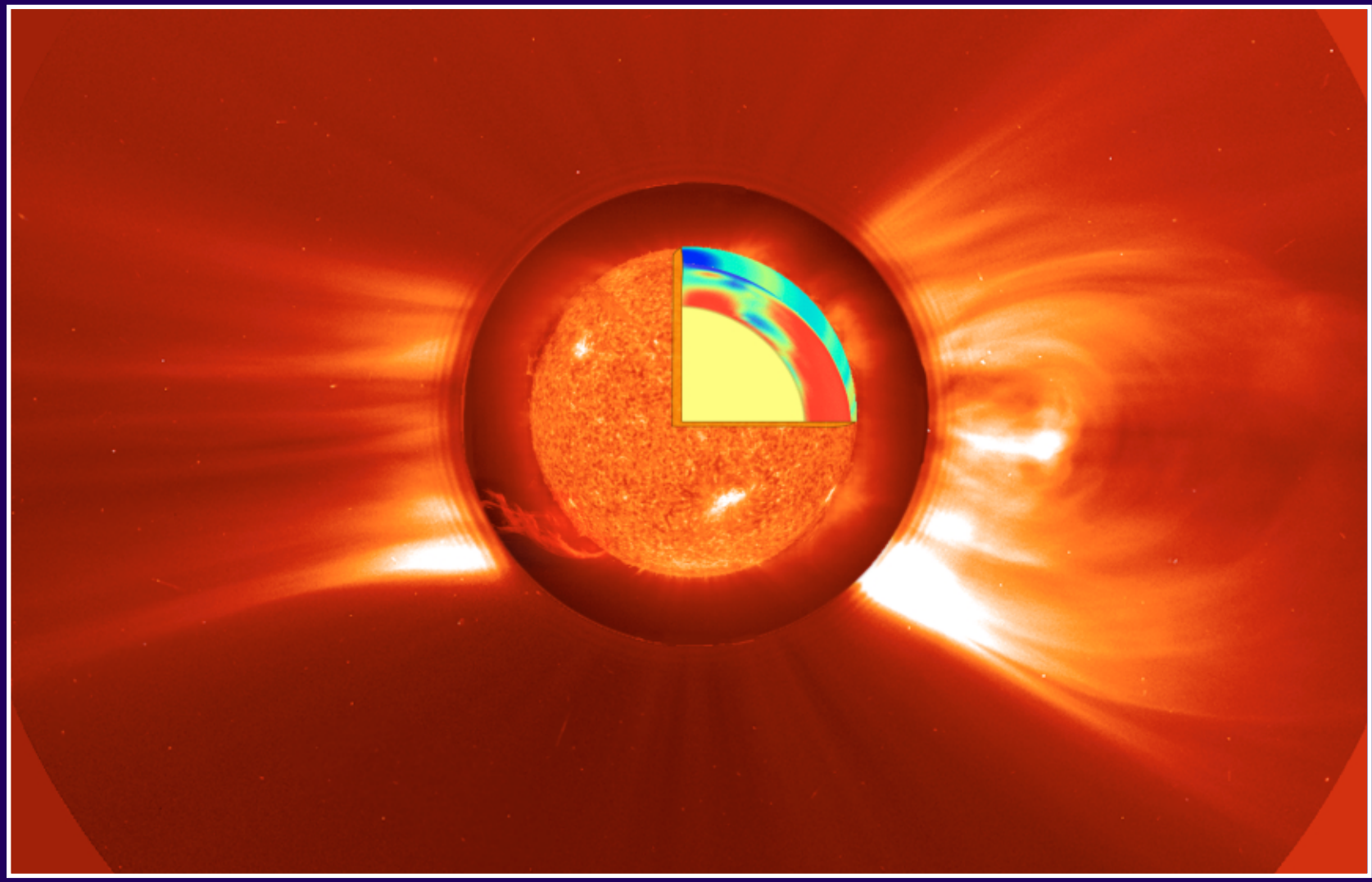
SOHO, a solar scientific observatory, has 12 instruments on board to observe the Sun 24 hours a day. It is a mission of international cooperation between ESA and NASA.



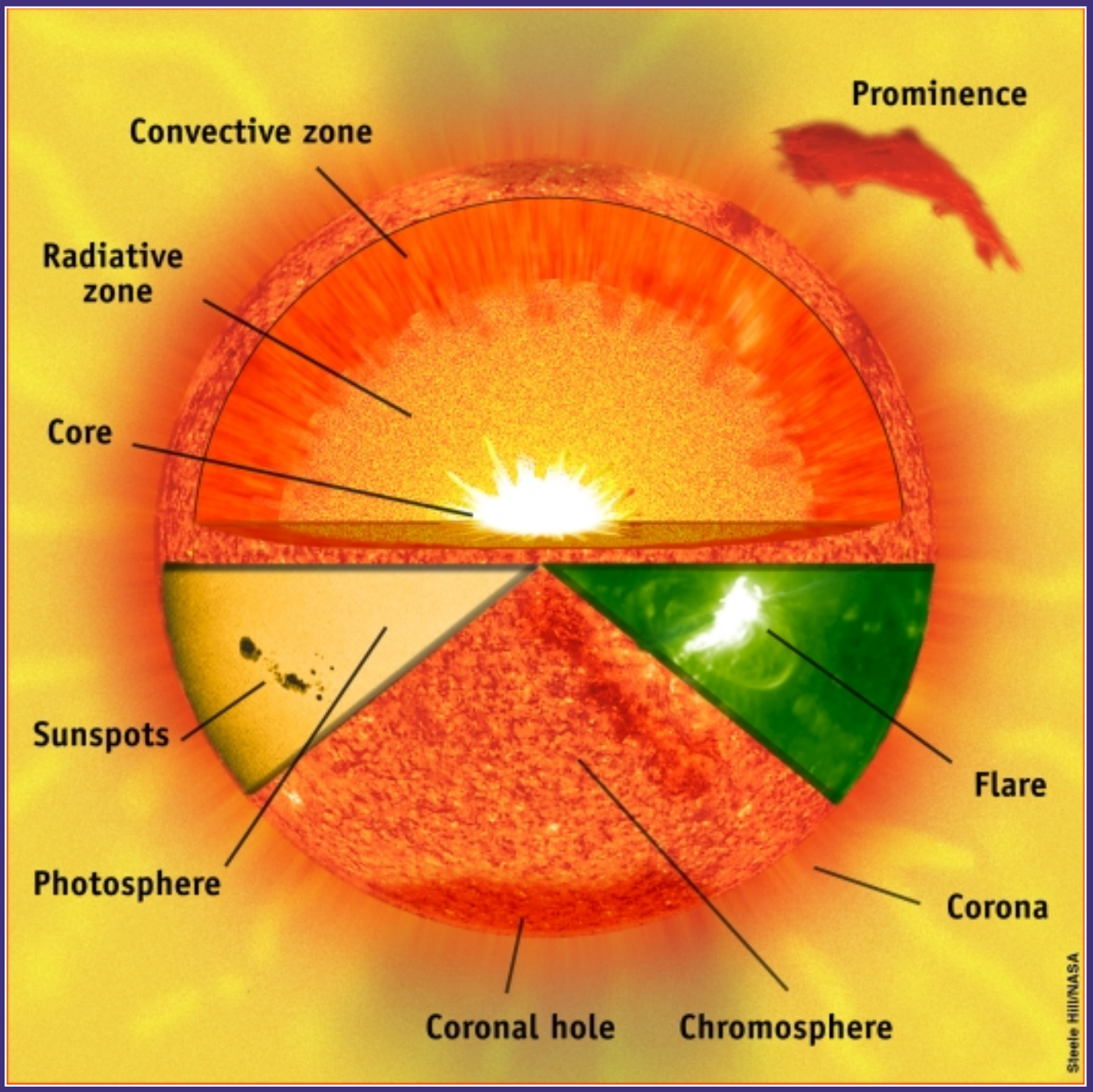
Schematic of SOHO's orbital path in relation to the Earth, moon, and Sun – SOHO is about 1.5M km sunward of the Earth



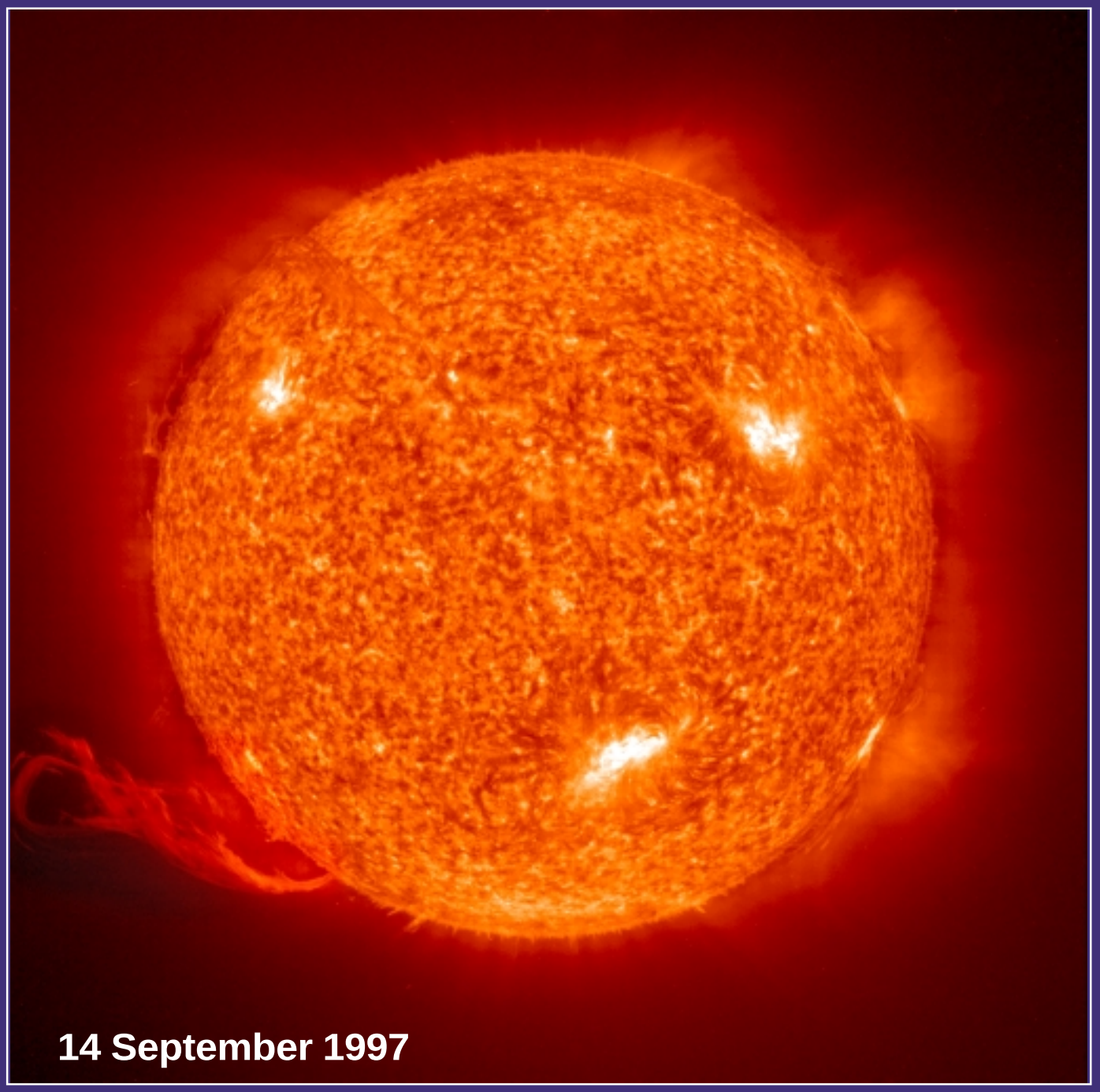
Ground operations lost contact with SOHO on 24 June 1998, but through diligent efforts the recovery team was able to nurse SOHO back to life by November 1998



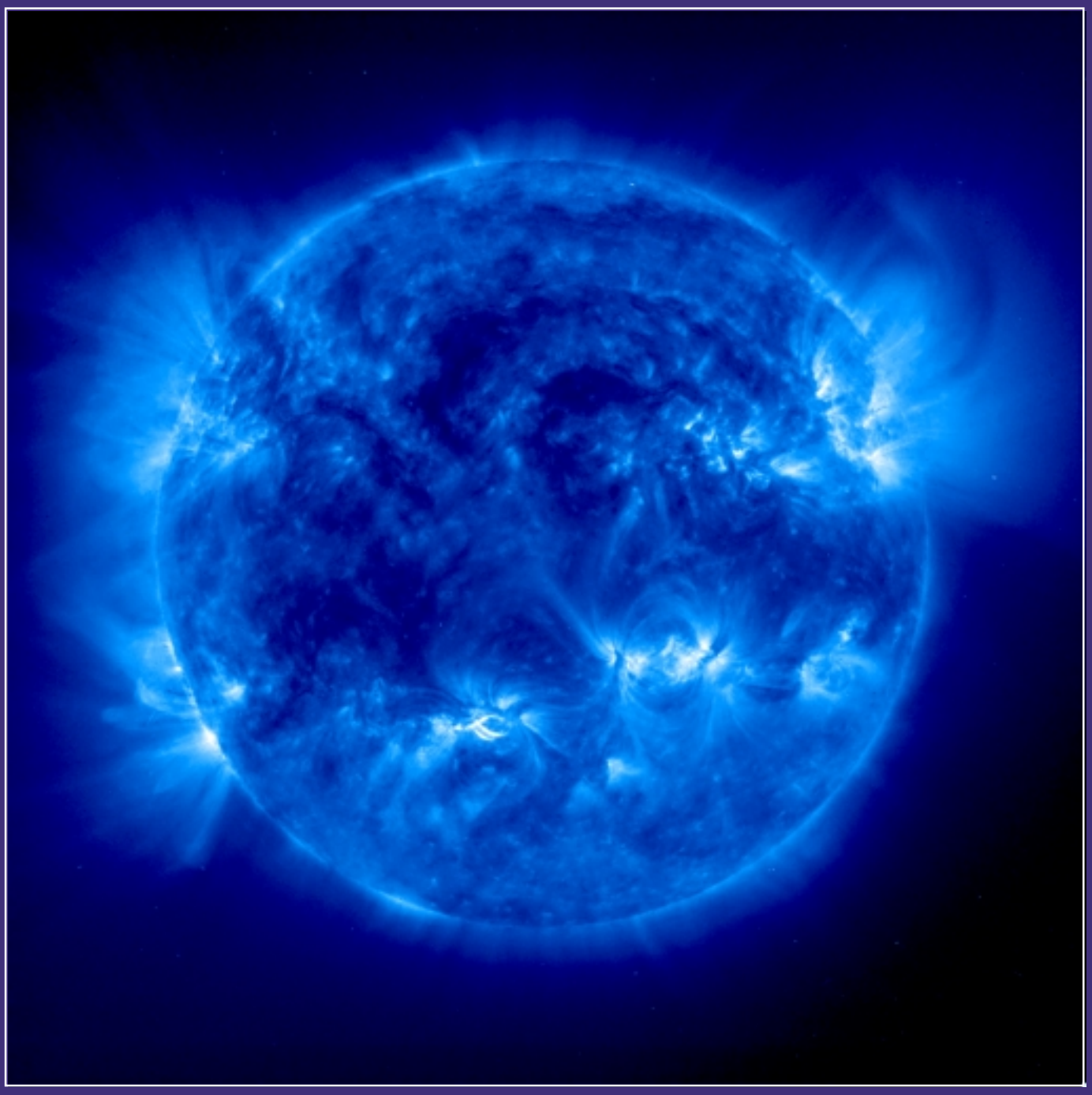
A composite image of the Sun that depicts the range of SOHO's scientific research from the solar interior, to the surface and corona, and out to the solar wind



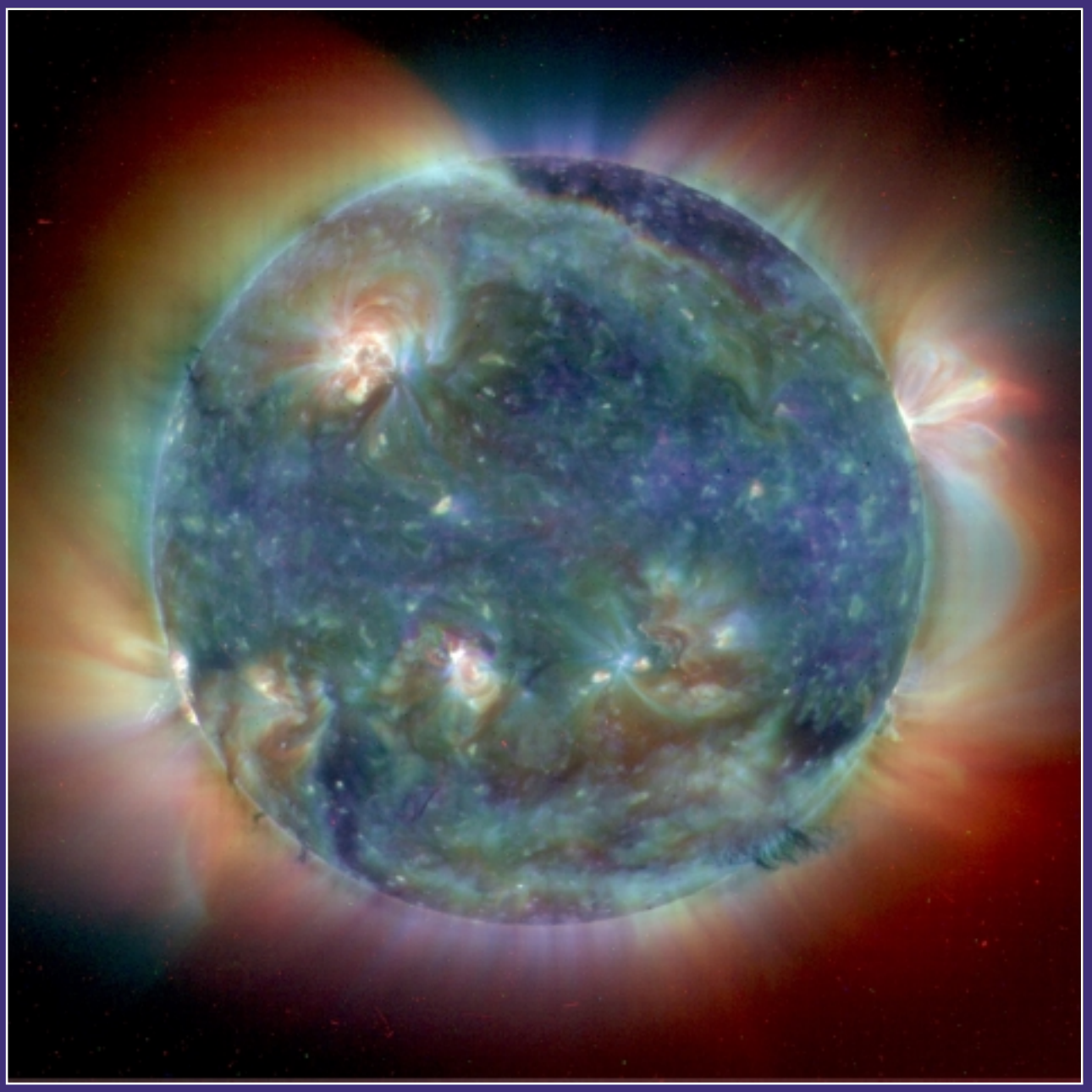
The parts of the Sun



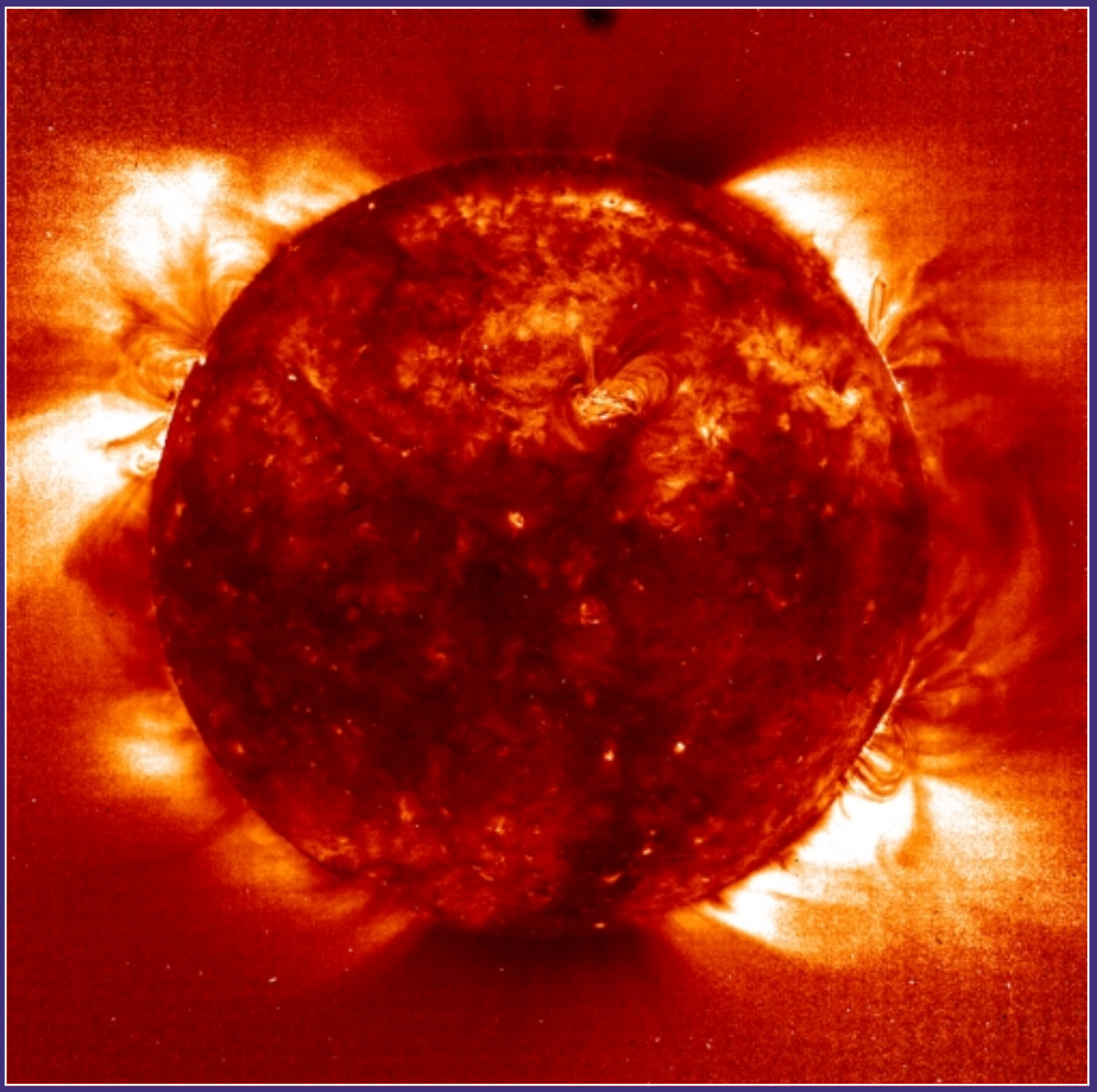
Erupting prominence as recorded by EIT in the He II 304Å line



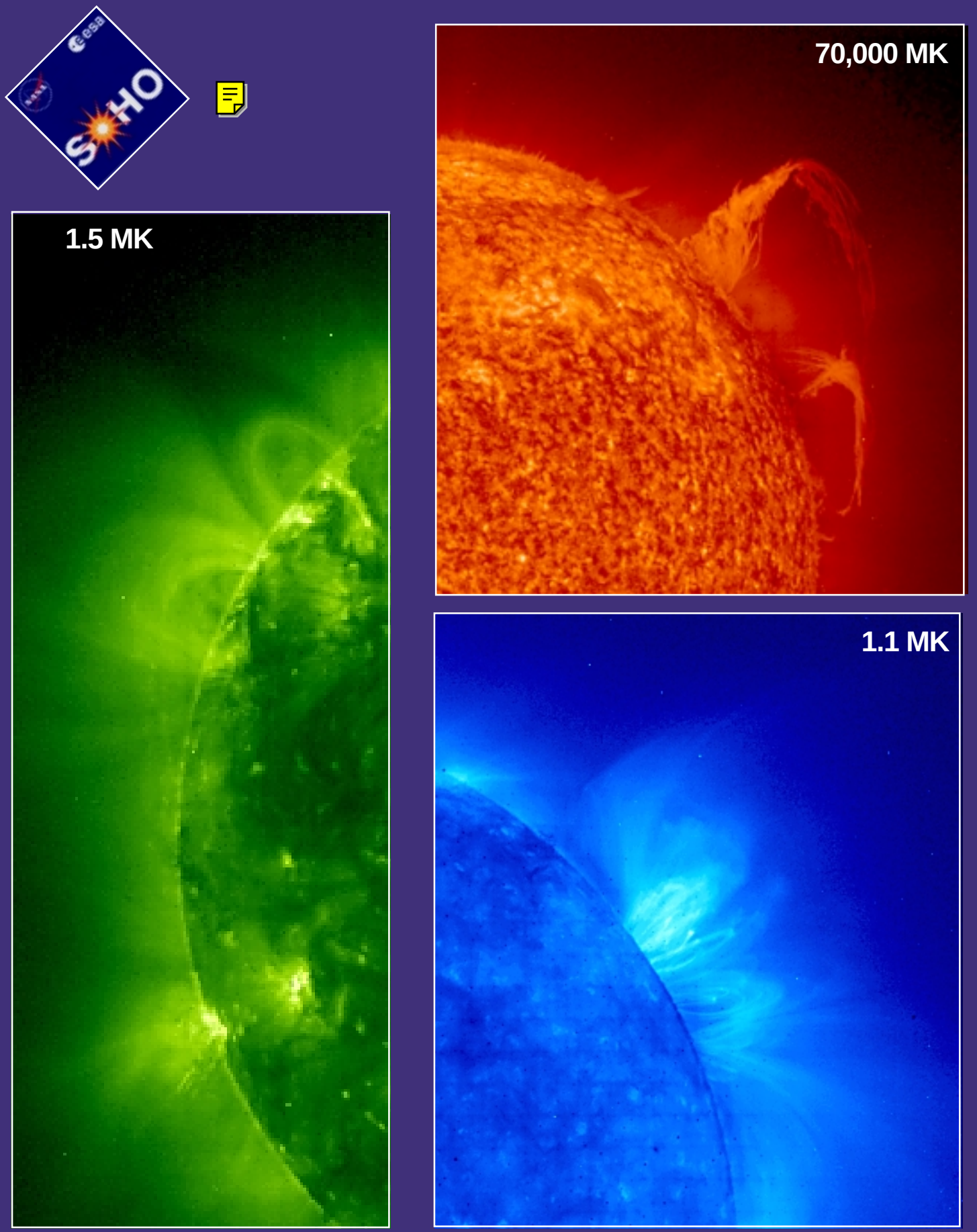
Active regions and magnetic loops as recorded by EIT in the Fe IX/X 171Å line



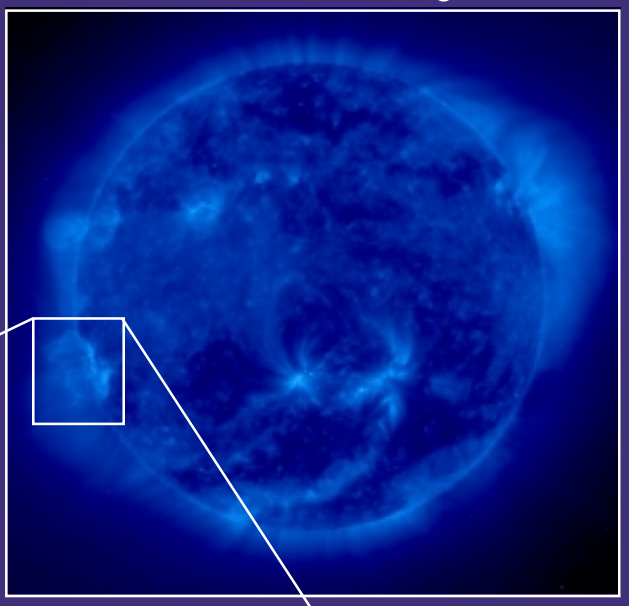
EIT composite image from three wavelengths (171Å, 195Å and 284Å) revealing solar features unqiue to each wavelength

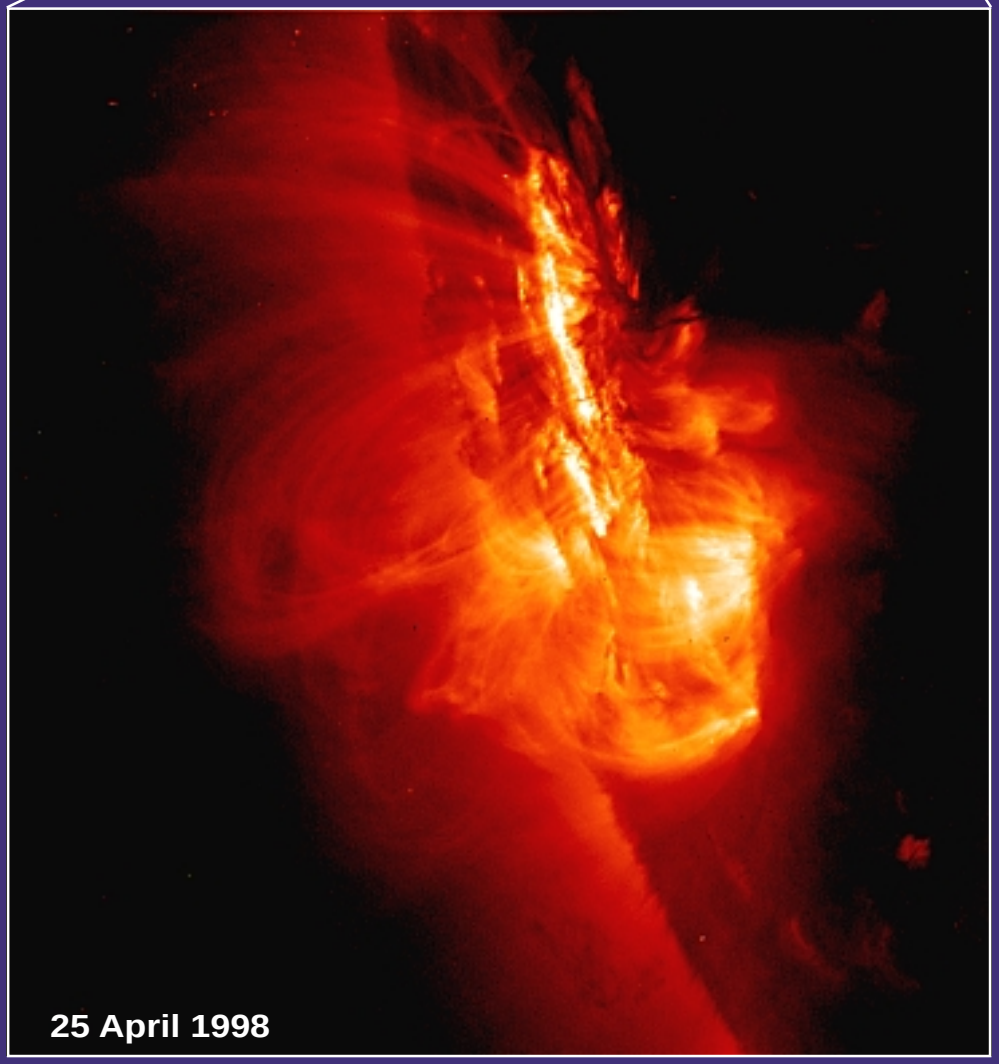


Ratio of EIT full Sun images in Fe XII 195Å to Fe IX/X 171Å – Bright areas are hotter; dark areas are cooler

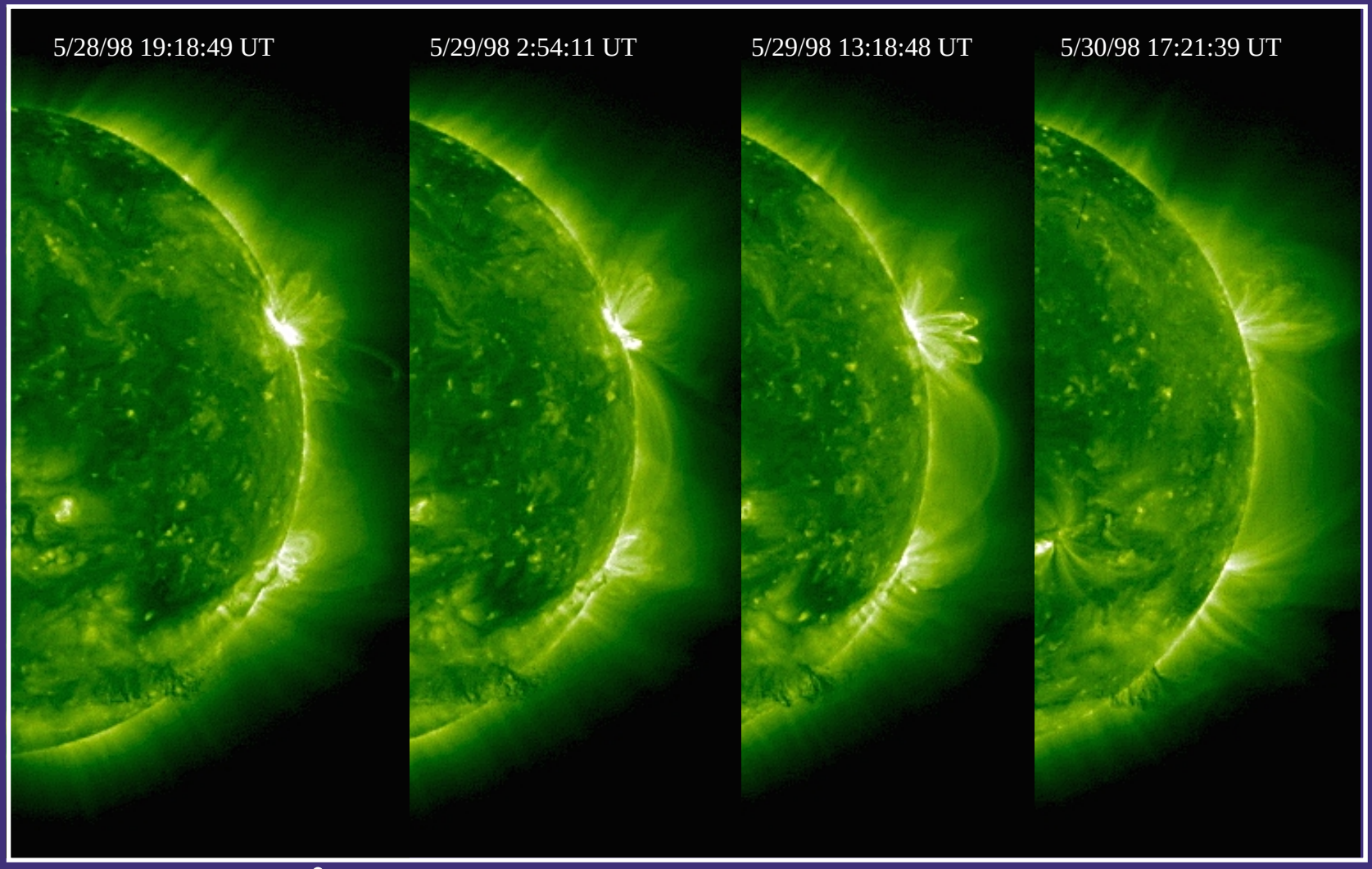


Magnetic loops and prominences captured by the Extreme ultraviolet Imaging Telescope (EIT) in three wavelengths



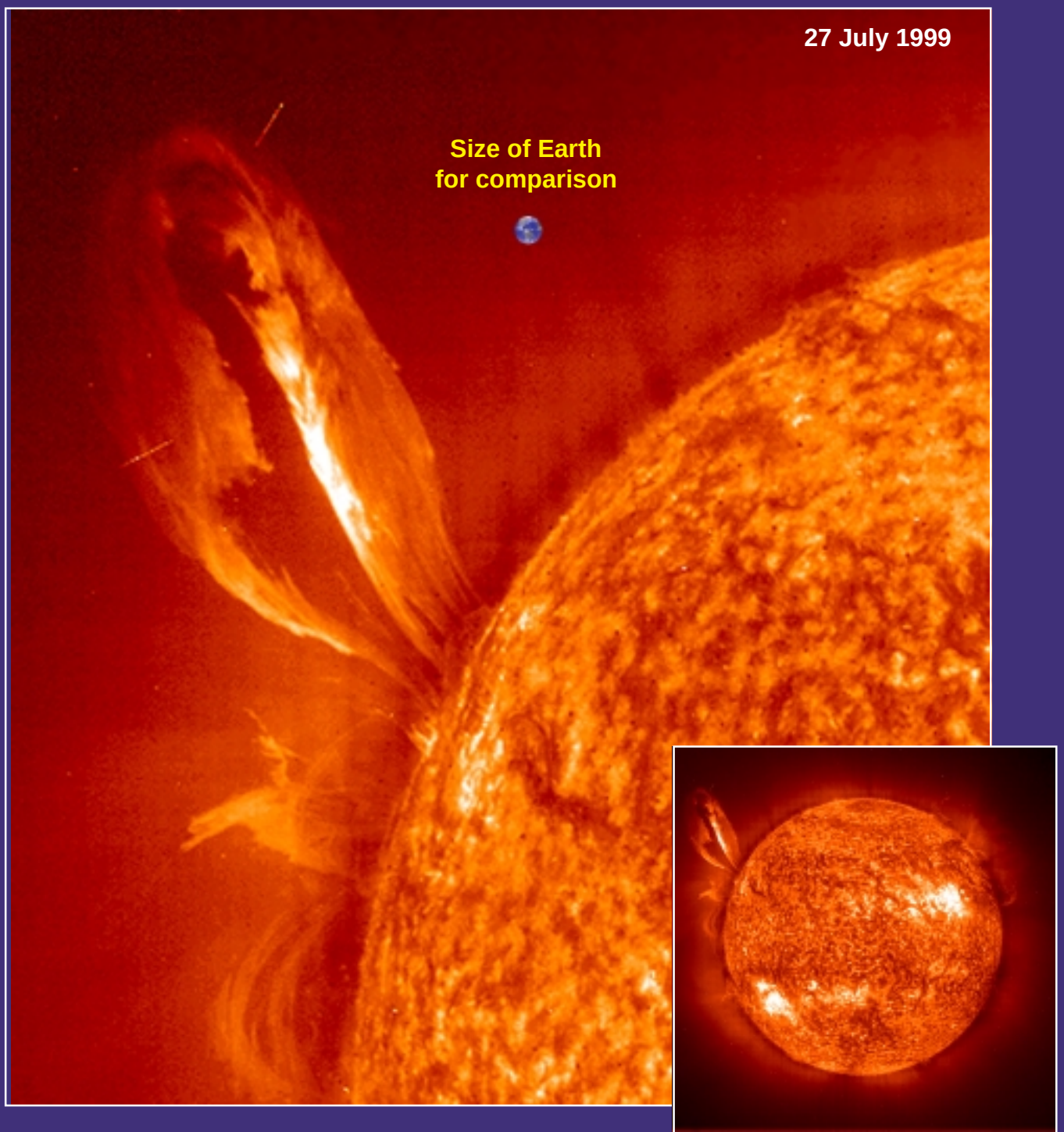


Close-up of an active region in extreme ultraviolet light from NASA's TRACE (Transition Region and Coronal Explorer) spacecraft

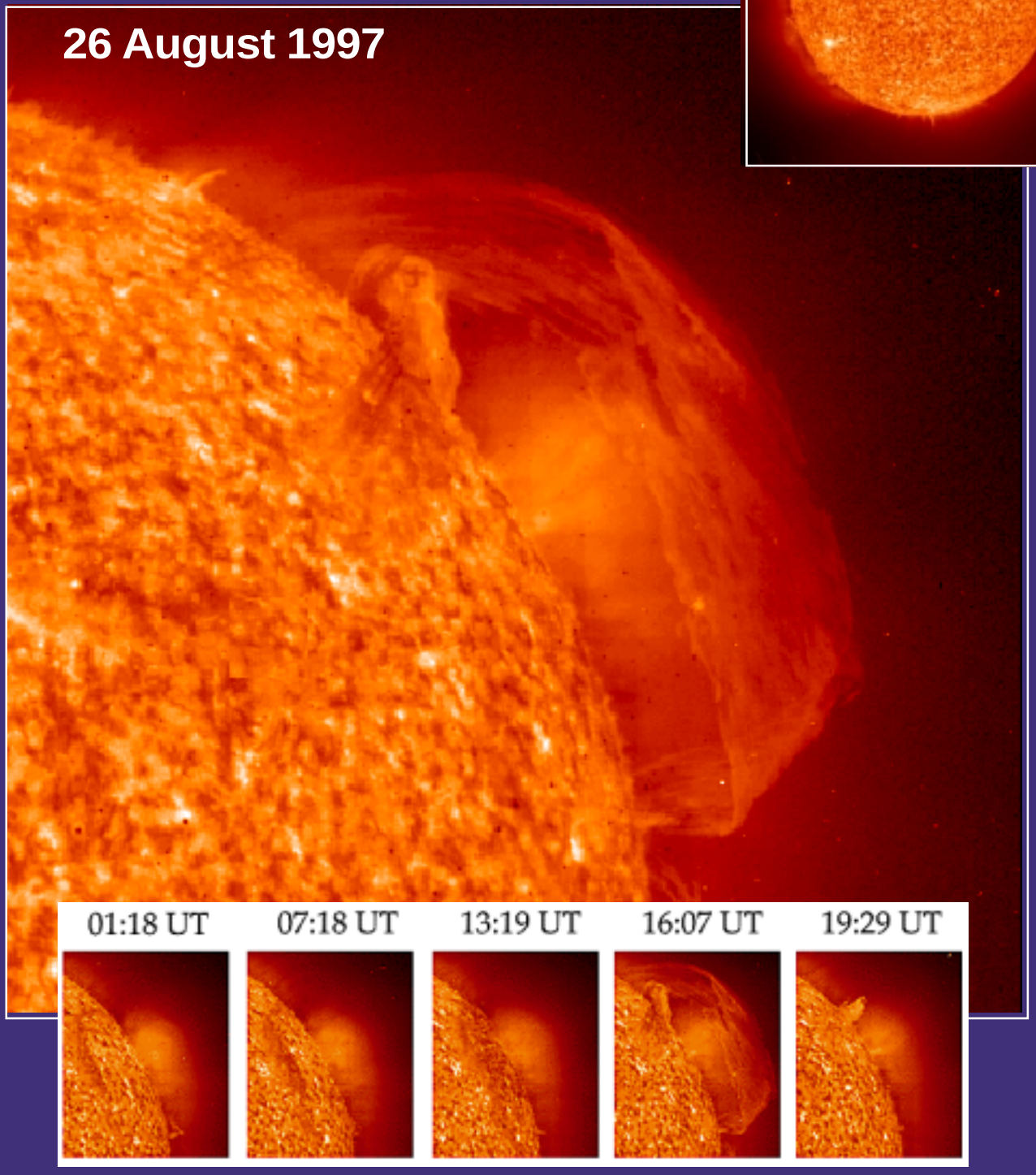


A series of EIT 195Å images over two days shows two active regions connecting their magnetic field lines over a large area of the Sun

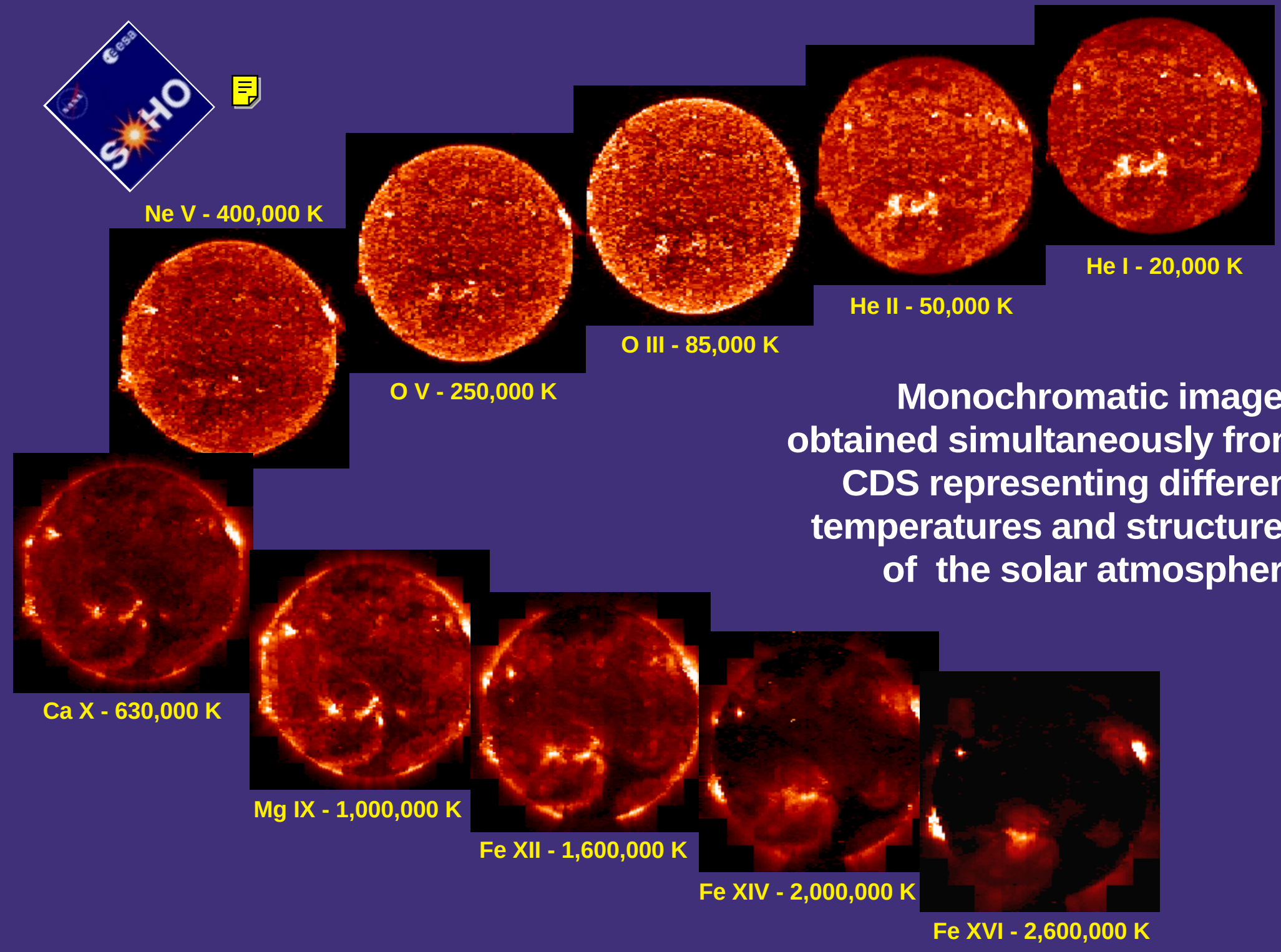
Images are Fe XII at 195Å showing the solar corona at a temperature of about 1.5 million K.



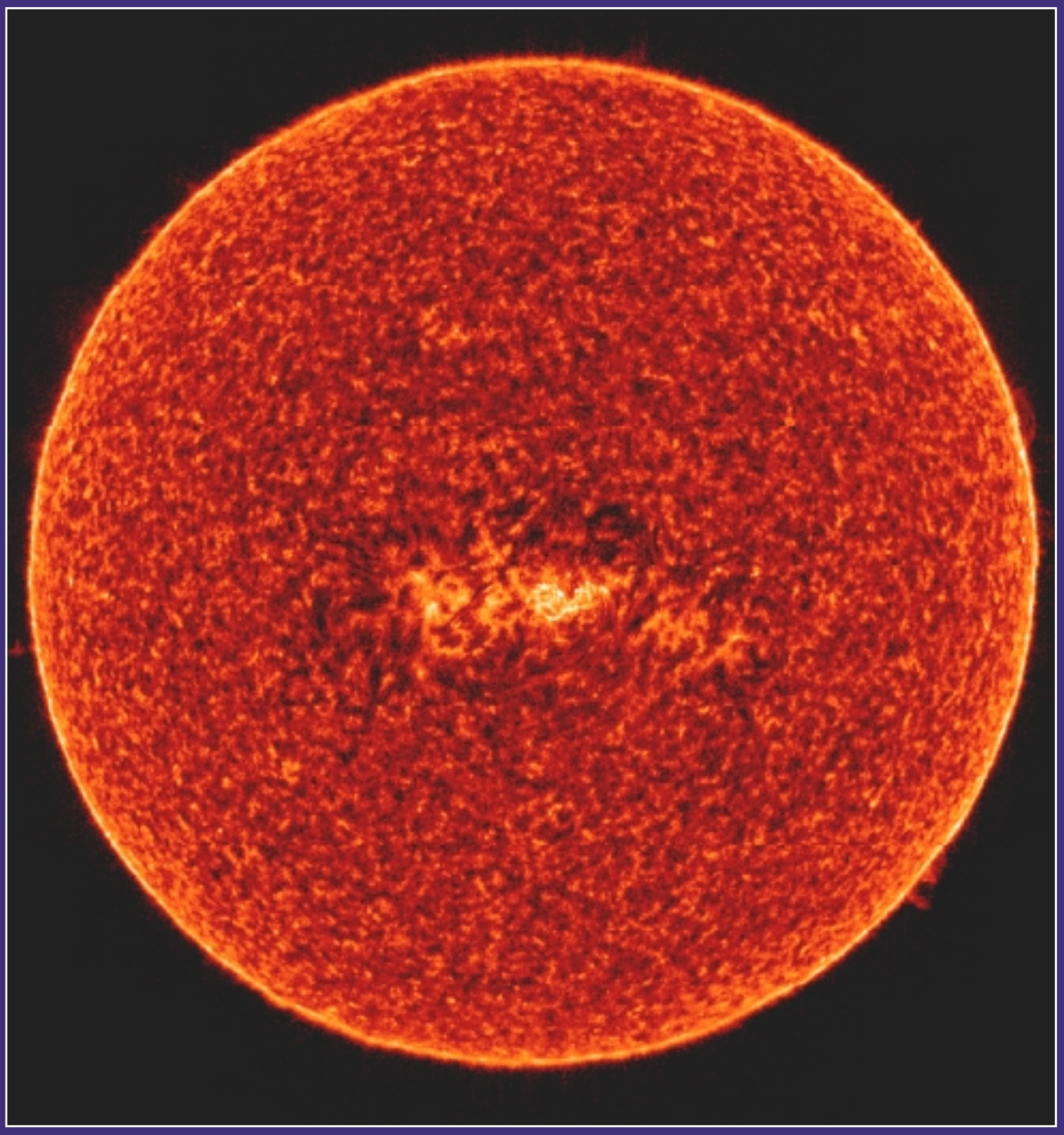
Large, eruptive prominence in He II at 304Å, with an image of the Earth added for size comparison



One of the largest eruptive prominences recorded by SOHO/EIT in 1997 in He II at 304Å.
It reached 28 times the size of Earth.



Monochromatic images obtained simultaneously from CDS representing different temperatures and structures of the solar atmosphere



SUMER image in S VI at 933 Å
on 12 May 1996